
IV. *Observations on some Animals of America allied to the Genus Antelope. By Charles Hamilton Smith, Esq. A.L.S.*

Read May 4, 1819.

ANTILOPE FURCIFER.

Prong-horned Antelope. *Travels of Lewis and Clarke.*

Le Cabrit or Cabree of the *Canadian Voyageurs*?

TAB. II.

THE specimen from which the annexed drawing was taken is in the museum of Mr. Peel at Philadelphia; it is the only one preserved of those which Messrs. Lewis and Clarke sent to the President of the United States during their exploratory travels up the Missouri. It is a complete skin of an adult male, stuffed with great skill, although in a very indifferent state of preservation. Through the liberality of Mr. Peel I was enabled to make the drawing, and to take the following dimensions:

Total length from nose to tail . . .	5 feet 8 inches.
Height from the top of the shoulders to the soles of the fore-feet . . .	3 1
Length of the head	1 0
From the base to top of the horns in a straight line	0 9
Ditto ditto along the curve . . .	0 11
Distance from tip to tip	0 10½
Circumference of the body behind the fore-legs	3 4
Length of the tail	0 1½

In



C. Ham. Smith del.

Antelope Turcifer.

J. Curtis sculp.

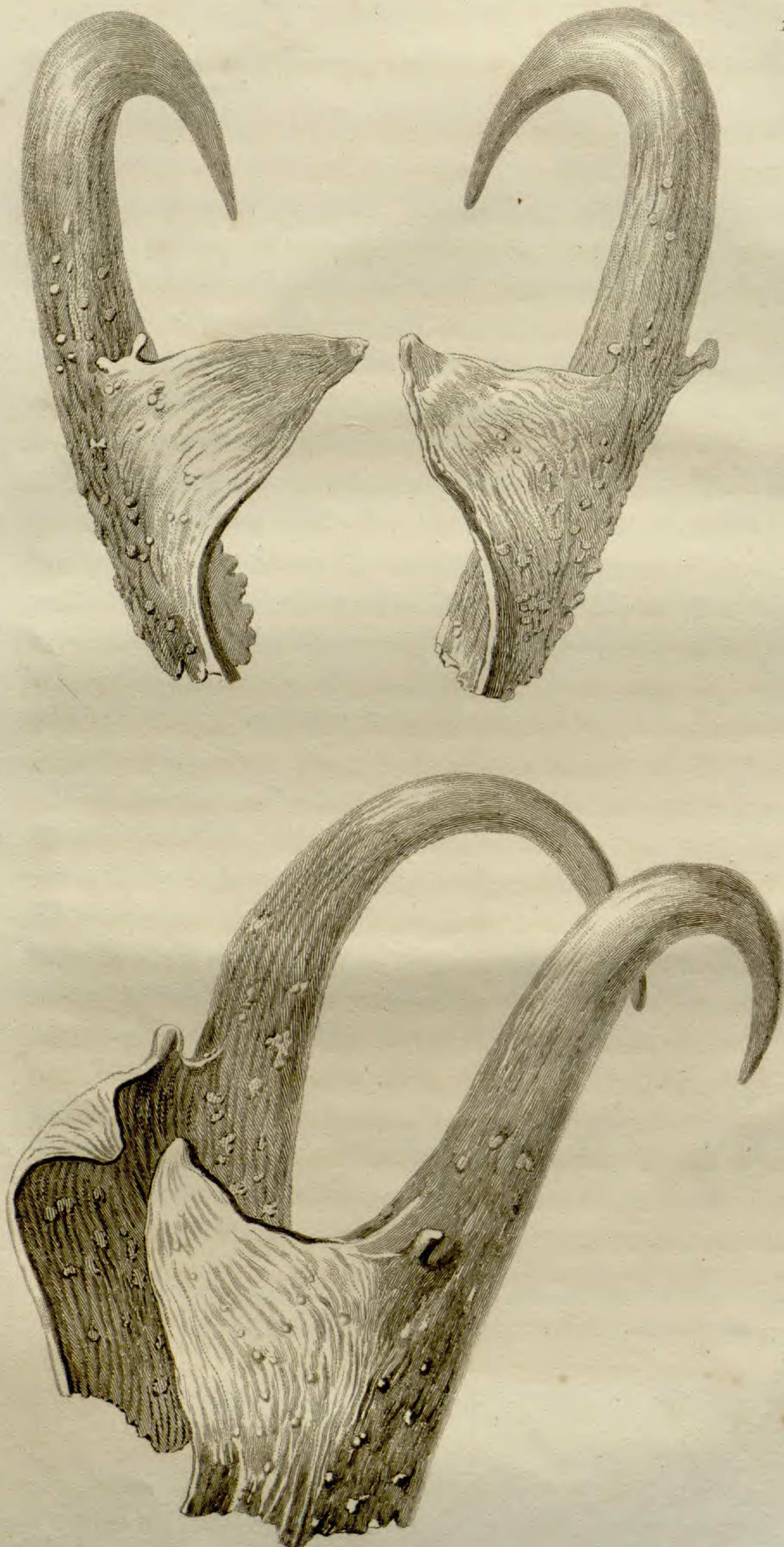
In the general aspect this animal resembles the chamois, though considerably larger in all its dimensions: the nose is small, and the nostrils are formed like those of a sheep; the forehead broad, with the edges of the orbits of the eyes strong and prominent; above and somewhat within the posterior part of the orbits are placed the horns, which in form and character differ from every known animal of the ruminating order; they are about five inches in circumference at the base, laterally compressed, nearly flat on the inside and roundish on the outside; obscurely wrinkled and striated, and marked, principally on the inside, with small horny pearls resembling those on the horns of the stag. From the base they carry the same thickness upwards about seven inches, where the anterior part terminates in a compressed and striated snag, pointing forwards and upwards, and forming a fork with the posterior part, which becomes suddenly round and taper, and curves backwards and inwards, ending in an obtuse point: their position on the head is nearly two inches asunder, hanging slightly forwards and outwards over the eyes; the colour brown-black; the horny substance is thin at the base and a little translucent, and the hollow within sufficient to fit the two forefingers of a man's hand. The teeth, as far as they were visible, appeared similar to those of other antelopes of equal size. No lachrymary sinus was distinguishable, nor could I detect the existence of similar cavities behind the horns, as are observed in the chamois. The ears are about six inches long, narrow, pointed, fawn-coloured, and lined inside with long white hairs. The forehead, nose, temples, neck, back and hams are of a foxy dun-colour, with the sides paler: the lips, chin, throat, a spot below the ears, one under the throat, breast and belly yellowish-white: the croup, and the long hairs which form a tuft on the stump of the tail, clear white. All the legs are bright ochre-colour, slender, yet firm. The pasterns remarkably

remarkably long, and the hoofs small, pointed and black, measuring scarcely half an inch from the crown to the sole: there are no tufts on the knees. The texture of the hair is soft and straight, falling off readily: from between the shoulders it points forward on the ridge of the neck, and from the horns, where it is longer, it turns backwards, meeting at the occiput, where it forms a kind of tuft. The eye, according to a memorandum, is hazel-colour; and the whole animal presents a character uniting vigour with considerable beauty.

Having had an opportunity of showing the drawing to a very intelligent Indian of the Kluche nation*, inhabiting the western branches of the Stony Mountains, he recognised the figure immediately, and stated its name to be *Kistu-he*, or, as he translated it, Little Elk. He observed that during winter, when enormous heaps of snow cover the mountains, these animals come down into the plains, and that they are at that time covered with long whitish hairs.

The species is found over a vast extent of country in central North America, ranging in small herds, or rather families, along the middle regions of the Stony Mountains, where they seem to fill the station which the chamois does in the Alps; mixing occasionally with the American *Argali*, which occupies the summits. They spread to the eastward along the banks of the Upper Missouri, and are remarkable for prodigious fleetness: to this capacity Messrs. Lewis and Clarke bear ample testimony; yet the Indians hunt them with success. In the memoranda of a journal written by Mr. Charles Le Rey, a Canadian trader, who passed several years of captivity among the Siour Indians, it is stated that, being with the hunters on the river Jaune in pursuit of these

* This man had come from Nootka-Sound, and had been for some years a servant to an English fur-merchant: he spoke English, and bore a singular resemblance to a Chinese Tartar.



animals, the party selected for the sport a hill the ascent of which was gradual, but the opposite side precipitous: at the bottom of the slope they formed a chain of hunters, and crawled gradually and simultaneously towards the summit, inducing the game to approach the precipice. When arrived at a convenient height, they all suddenly rose and gave a loud yell, which terrified the timid creatures so completely, that most of them sprang over the brink and were dashed to death in their fall. Upwards of sixty cabrits and big-horned sheep were thus slain in a single beat*.

ANTILOPE PALMATA.

Mazame? *Hernandes*.



TAB. III.

I have adopted the trivial appellation of Palmated Antelope merely to distinguish an animal the horns of which are preserved in the museum of Surgeons'-college, Lincoln's-Inn Fields. I am indebted to Sir Joseph Banks for the knowledge of the existence of this highly interesting specimen, and to the liberality of the Curators of that splendid establishment for permission to make a drawing, of which the annexed is a copy. All I could learn of their history is, that they were presented to Mr. Hunter without a memorandum; consequently without giving any idea of the animal, or of the country from which they were brought. By some persons they were considered as a monstrous production: in their appearance, however, they bear so great a resemblance to the horns of the animal before described, that they are either of a species immediately allied to it, or possibly only a variety.

Part of their base is wanting; what remains is about eleven inches and a half long, measured upon the curve. At their pre-

* There is an imperfect copy of this journal printed at the end of *A Topographical Description of the State of Ohio*, 8vo. Boston, 1812.—I have seen a manuscript.

sent base they are two inches and a half in their greater diameter, by one across. The anterior and posterior parts are compressed into a sharp edge, exhibiting the appearance of a hard, black and brittle horny scabbard, with the surface strongly pearly and striated for about seven inches towards the summit: here the anterior part of each horn terminates in a compressed, leaf-like, obtuse, deflected, striated and pearly point; the posterior part assuming a round, taper, and regularly uncinated form, much larger and more pointed than the preceding. Upon or near the ridge which unites the leaf-like part to the after-horn, are one or two small knobs or button-like horny pearls, somewhat resembling the buds of incipient ramification.

In the museum these horns are placed together upon a bit of wood; but I apprehend their relative situation to be transposed: that is, that the right horn is fixed on the left side. This I judge from the analogy they bear to those of the Prong-horned Antelope; and because, if the hooks bent outwards, they would arrest the progress of the animal. I have therefore ventured to place them in the drawing in what I presume to be their true position. The reasons which induce an opinion that these horns belong not to a variety, but to a species distinct from the Prong-horned Antelope, are, that the section of the base of the Palmated Antelope's horn is lozenge-shaped (); whereas that of the Prong-horned Antelope is a compressed oval (): that the former is on both sides striated and pearly to the bottom, or at least as far as the present base; while the latter is only striated on the surface next the forehead, and wrinkled on the outer side:—that these are not sexual differences, is evident from the horns of the Palmated Antelope being more bulky than the others, which belong to an adult male. Hence it may be concluded that they belong to a new and as yet undescribed species, the habitat of which will probably be found to be in some mountainous
part

part of America. It is perhaps proper to observe that the *Cervus pygargus* of Pallas, as figured in Schreber's plates, bears a strong resemblance in many particulars to the first-described species. I am ignorant whether Professor Pallas had opportunities to examine this species of deer with his usual accuracy.

It appears that the early writers who noticed the natural history of the new hemisphere were acquainted with one, and probably the Palmated species of these animals. I had an opportunity of comparing the figure of the Mazame in Hernandez with the stuffed specimen at Philadelphia; and though the engraving is clumsily executed, there can be no doubt that it was done from one of these animals, and the description distinctly points out the most prominent characters. "Mazames," it is observed, "caprarum mediocrium, paulove majori, constant magnitudine; pilo teguntur cano et qui facile avellatur, fulvoque; sed lateribus et ventre candentibus..... Cornua gestant juxta exortum lata, ac in paucos parvosque teretes ac præacutos ramos divisa et sub eis oculos." Recchus justly viewed this and another species which I shall presently notice, as Antelopes, or, in the language of his time, as Capreæ. He says, "Hos (Telethecalmaçame et Temamaçame) ego potius computaverim in Capreos quam inter Cervos*."

ANTILOPE MAZAMA.

Antelope of Honduras? *Anderson's Hist. of Honduras*, 8vo.

Mazame seu Cervus cornutus. *Seba, tab. xlii. fig. 3.*

Count de Buffon, in his article *Des Mazames*[†], assumes that there were neither musks, antelopes, nor goats, nor any analogous

* *Nard. Ant. Recchus apud Hernandezium*, lib. ix. cap. xiv. p. 324 et 325. figuras ad ipsas paginas.

† The word *Mazame* or *Maçame* is derived from the Mexican *Maçatl*, which I apprehend Baron Humboldt has affixed without sufficient reflection to the Virginian

gous animals in America at the time of the discovery of that continent. This opinion, for which he certainly could not have sufficient grounds, led him into the error of ascribing the animals mentioned by Recchi in Hernandez, to the deer or roebuck kind. Indeed, the singular form of the horns in one species, rudely figured in the work, sufficiently justified a doubt, if he had not persisted in describing the other and the two figures in Seba as deer or as African animals, notwithstanding that the last-mentioned author, who obtained many of his specimens from Dutch Guiana, positively asserted that they were both from New Spain. The existence however of one, if not of both the species, in the warmer parts of America, is established in my own mind from the following circumstance.

Some years ago, while I was on the coast of the Gulf of Mexico, under circumstances peculiarly unfavourable to research in natural history, the canoe in which I was having anchored within the river St. Juan, the Musquito Indians who were with me brought an animal on board, inferior in bulk to a domestic goat, but higher on the legs; in aspect resembling a small lean sheep, with soft hair instead of wool: the horns about six inches long, obscurely annulated, dark-coloured, bent back and pointed: general colour pale-rufous brown: belly, inside of legs, breast and chin yellowish-white: grey about the eyes and nostrils: tail thick and short: legs more stout than those of African antelopes: hoofs black: and the whole animal somewhat heavy in make. I was then unacquainted with the figure in Seba, and it appeared an undescribed species. Having, however, no mate-

stag. As far as my own inquiries have gone, the word is generic for the deer, antelopes and musks of America. *Tetlelcal Maçame*, *Temma Maçame*, *Maçatl Chichiltic*, *Yziac Maçame*, *Tlamacaz que Maçatl*, *Quauht Maçame*, and *Tlahuica Maçame*, all denote different animals, some of which are certainly not deer. I shall perhaps resume this subject, if opportunities should offer, to notice several species of deer of America, some of which are new, and the others imperfectly known.

rials for making memoranda, I was obliged to defer it; and my hungry companions soon disposed of it. I wrote to the late Dr. Brown* upon the subject, and he consulted Dr. Dancer of Jamaica, who pointed out the figure in Seba; but as there was no copy of this work within my reach, I was obliged to defer my inquiries until my return to Europe. The figure in Seba is incorrect in expression; but when compared with his description to my own memorandum, the identity appears to me fully established. He observes, “Mazame seu Cervus cornutus. Hæc species omnino differt ab illa quam Guinea profert. Capite et collo, crassis curtisque est, et bina gerit tornata quasi cornicula, in acutum recurvumque apicem convergentia, retrorsum reclinata. Auriculæ grandes, flaccidæ; at oculi venusti. Cauda crassa, obtusa. Pilus totius corporis subrufus est, paulo tamen dilutior, qui caput et ventrem tegit. Femora cum pedibus admodum habilia†.” Buffon, who confounds his Cariacou with the Mazames, did not observe that the Cariacou or female of the Bajeu deer of Guiana has a small moist muzzle like the rest of the deer kind; while the Mazames or antelopes of the same country have the nose of a sheep; at least as far as they have come under my observation. In the History of Honduras by Mr. Anderson, the antelope is noticed; but (I quote from memory) he represents it as perfectly similar to *A. Dorcas*. The specimen which I saw, appeared however to bear a greater resemblance to the figure of the Chinese antelope about the head, or even to *A. Saiga*, than to the *Dorcas*:

* Surgeon of the Royal Artillery at Port Royal, and known as a botanist.

† As I have not drawn the figure from the animal, but rather from recollection and the sight of Seba's, I refer to that author for it. His collection was purchased by the Prince of Orange, and passed along with it into the Museum of Paris. It is to be hoped, that, should the specimen still exist, a better figure will be published there. I cannot help observing, that the horns of this animal have a singular resemblance to those of the *A. lanigera* and the *A. Sumatrensis*.

but as I am not positive as to the sex or age of mine, his judgement may be more correct.

ANTILOPE TEMAMAZAMA.

Cervus Maçatl chichiltic seu Temamazame? Seba.

Capra Pudu. Molina?

Ovis Pudu. Linn. Syst. Gmel.

Spring-back of New Jersey?

I now come to a fourth species of American Antelope, the existence of which is more doubtful; but which, in the opinion of the natives of the United States, formerly abounded and is still occasionally found in the state of New Jersey, where it is known by the name of the Spring-back. This denomination is a corruption from the Dutch spring-bock; and these people being the first settlers in that colony makes the term *bock* (male of the goat) the more remarkable, because their forests abounded with the American roebuck and Virginian deer: they must therefore have been acquainted with the appearance of cervine horns in all their varieties of age and species; consequently the animal so named must have borne a character which justified in some measure the term applied. This character, it is asserted, is that of the antelope, though it is possible that it refers in reality to a species of deer whose horns are always single shoots. In the Museum of Philadelphia there is a part of a skull with the horns attached to it brought out of the Jerseys, and said to be those of the spring-back: they are however decidedly cervine, and the production of a young deer, or of an undescribed species. But the misapplication of a name does not destroy the probability of the existence of an analogous animal to the antelope, if not any longer in New Jersey, at least in the hills and sandy plains along the frontier of New Mexico and the province of Santa Fé.

I pos-

I possess a copy of a drawing obtained from an American gentleman, who stated it to have been taken from an animal shot near the sources of the Red River. Its form is light and slender; the nose small and ovine; ears long, narrow, and rounded at the tips; the tail several inches in length, and carried erect like that of a goat. In the memorandum accompanying the drawing, the size was stated "to equal a large kid; the horns to be above five inches and a half long, black, slender, and wrinkled at the base, lying straight along the prolongation of the forehead, diverging and then bending back at a slight angle." The colour resembles that of a roebuck, but is somewhat more rufous: the mouth, a patch on the throat, belly, and inside of the legs and underpart of the tail, white; the eyes dark and full.

This description will hardly admit the supposition of the animal's being a modification of the domestic goat run wild. It agrees with the *Ovis Pudu* of Molina: but the figure in Seba, and still more his description, coincide. He says, in the explanation of Tab. xlii. no. 4: "*Cervus Maçatl chichiltic seu Temmamaçame dictus. Horum ingens numerus per alta montium Novæ Hispaniæ divagatur, qui gramine, foliis, herbisque victitantes, cursu saltuque velocissimi sunt. Europæos cervos habitu referunt, sed instar hinnulorum valde parvi. Cornua tornata, recurvatum in acumen convergunt, quæ singulis annis, nova spira aucta, ætatem animalis produnt. Cornuum color coracinus. Oculi auresque magni et agiles. Dentes prægrandes et lati. Cauda pilis longis obsita; brevioribus et dilute spadiceis universum corpus vestitur.*" Referring to Hernandez, we find a similar animal figured, but with very heavy proportions. His specimen is perhaps a variety; for the "*brevissimis cornibus acutissimisque, coloris fulvi, fuscii et inferne albi*" differs from the above, but resembles in the colour of the belly the figure in my collection. See Hernandez, p. 325.

ANTILOPE LANIGERA.

Rupicapra Americana. *Blainville.*Ovis montana. *Ord.*

TAB. IV.

This species, which Mr. Ord has noticed, in a Memoir read to the Society of Philadelphia, under the denomination of *Ovis montana*, exhibits a compound character sufficiently anomalous to render a precise classification very questionable. Dr. Blainville, in his newly proposed subdivision of the genus Antelope, has arranged it next to and in the family of Chamois or Rupicaprae, under the appellation of *Rupicapra Americana*. There is, however, no coincidence of characters to justify this arrangement; unless it be that this animal like the chamois inhabits mountainous regions. The Prong-horned Antelope has a better claim to the denomination of chamois; and the epithet *Americana* is of too vague a nature, as several congeners are already known to exist in America: I have therefore ventured to propose the trivial appellation of *lanigera*, which, as far as we know, is exclusively the character of this species of antelope. The specimen from which Dr. Blainville took his short notice is that in the Museum of this Society, and the same from which the annexed drawing was taken*. Mr. Ord had still scantier materials for description, there being in the Philadelphian Museum only the scalp with one of the horns attached to it, and the skin without head or legs; it having served an Indian for a cloak. While I was at Philadelphia I examined this skin, and found it small, nearly destitute of the long hairs, but covered with very fine downy wool. I took it for that of a young animal, and was confirmed in this conjecture upon viewing another in Canada,

* The specimen here described and figured, was presented to the Linnean Society by the late Lieut. General Thomas Davies, F.R.S. and L.S.

which